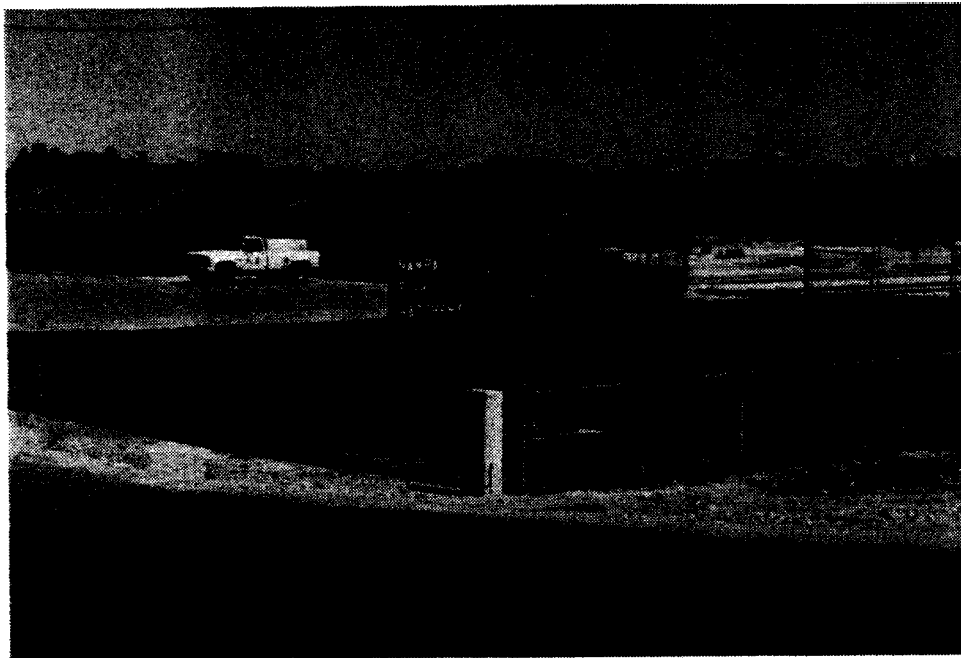




NAMPA HATCHERY

Annual Report

October 1, 1984 to September 30, 1985



by

**Walter D. Rast
Hatchery Superintendent II**

October 1987

TABLE OF CONTENTS

	<u>Page</u>
ABSTRACT	1
INTRODUCTION	2
OBJECTIVES	2
FISH PRODUCTION	2
Rainbow Trout	2
FISH TRANSFERS	3
FISH RELEASES	3
FISH CULTURE	4
Carrying Capacity	4
Health	4
Disease	4
FISH FEED UTILIZED	5
MISCELLANEOUS ACTIVITIES	5
ACKNOWLEDGEMENTS	6

LIST OF TABLES

Table 1.	Fish transfers from Nampa Hatchery to other stations	3
Table 2.	Fish releases by region	3
Table 3.	Fish feed used by Nampa Hatchery, October 1, 1984-September 30, 1985.	5

ABSTRACT

The Nampa Hatchery was scheduled to plant and transfer 250,000 pounds of rainbow and Kamloops trout into streams, lakes and reservoirs throughout Idaho. Our total production for the hatchery year came to 286,235 pounds of fish reared to be released to waters of Idaho.

We fed 381,571 pounds of feed, with a conversion of 1.333 pounds of feed, to produce a pound of fish. The total cost of fish feed came to \$68,729.50, which comes to 24 cents per pound of fish. The total cost of fish, excluding capital outlay, came to 38 cents per pound.

Author:

Walter D. Rast
Fish Hatchery Superintendent II

INTRODUCTION

Nampa Hatchery is located in Canyon County 3 miles south of Nampa, Idaho. It receives water from 8 artesian wells that measure 16 inches in diameter. Six of these wells are on hatchery property, and two belong to the Nampa-Meridian Irrigation District. The water flow varies from 31 to 36 cfs, and it appears the water table is directly related to water levels of Lake Lowell and irrigation seasons. I have been told by some of the old timers that this water was not here on the surface prior to the construction of Lake Lowell.

The hatchery has 10 raceways 120 ft. x 12 ft. x 4 ft. deep, 3 raceways 180 ft. x 12 ft. x 3 ft. deep and 16 raceways 50 ft. x 5 ft. x 3 ft. deep. The hatchery room has 5 fiberglass circular vats and upwelling incubators. The hatchery should be able to produce 300,000 pounds of fish with good timing, and that would be about the limit with our planting season.

OBJECTIVES

The objectives of the Nampa Fish Hatchery are:

1. To raise 1,000,000 fingerlings and subcatchable rainbow and Kamloops trout for different waters of the state.
2. To raise 600,000 catchable rainbow trout (200,000 pounds) to be transferred and planted in waters of the state.

FISH PRODUCTION

Rainbow Trout

R1 rainbow trout is the primary strain reared at Nampa Hatchery. Production on hand at the start of the year was 583,864 fish weighing 53,225 pounds. The year ended with 151,355 fish weighing 14,814 pounds. The hatchery received 756,137 eyed eggs during the year. Fish released to waters of the state totaled 645,046 fish (weighing 172,205 pounds). Transfers to other stations totaled 59,970 fish weighing 17,700 pounds (Table 1).

R4 rainbow trout on hand at the start of the year totaled zero fish. We received 1,536,906 eyed eggs, and the year ended with 621,189 fish on hand weighing 27,793 pounds. Fish planted to waters of the state came to 392,434 fish weighing 57,730 pounds (Table 2).

FISH TRANSFERS

Table 1. Fish transfers from Nampa Hatchery to other stations.

Date	Species	Station	Pounds	Number	Size
5-13-85	R1	Kamiah	3,000	9,900	3.3
5-20-85	R1	Kamiah	3,000	9,300	3.1
6-03-85	R1	Kamiah	3,000	9,900	3.3
6-13-85	R1	Kamiah	3,000	9,600	3.2
7-01-85	K1	Clark Fork	1,200	19,920	16.6
7-08-85	R1	Kamiah	2,700	11,070	4.1
7-19-85	R2	Kamiah	<u>3,000</u>	<u>10,200</u>	3.4
	Total	rainbow	17,700	59,970	
	Total	Kamloops	1,200	19,920	
	Total	transfers	18,900	79,890	

FISH RELEASES

Table 2. The following are totals planted in the different regions of the state from Nampa Hatchery.

Region	Species	Numbers	Pounds
2	Rainbow R1	66,830	19,900
2	Kamloops K1	153,580	14,200
3	Rainbow	505,021	141,30
3	Rainbow	237,714	41,330
3	Kamloops K1	137,010	15,300
4	Rainbow	16,320	2,400
4	Rainbow R4	48,320	5,200
5	Rainbow	56,875	8,600
5	Rainbow	106,400	11,200
5	Kamloops K1	<u>92,800</u>	<u>7,900</u>
	Total R1	645,046	172,20
	Total R4	392,434	57,730
	Total K1	<u>383,390</u>	<u>37,400</u>
	Total	1,420,87	267,33

K1 Kamploops on hand at the start of the year totaled zero fish. Eggs received from Troutlodge totaled 552,356. The year ended with zero fish on hand. K1 releases totaled 383,390 fish weighing 37,400 pounds, and 19,920 were transferred to other stations weighing 1,200 pounds.

FISH CULTURE

Carrying Capacity

We use both commercial and homemade upwelling incubators, and we are set up so they can be loaded with 200 to 300 ounces of eggs in the hatchery building or the small raceways outside. All eggs are inventoried by the water displacement method.

We received our eggs in lots of 250,000 to 300,000 eggs. If they are started inside the hatchery building, they have to be moved outside after they have been on feed for one week. We kept our fish loaded according to flow and density indexes recommended by the Coldwater Short Course on hatchery management.

Health

All incoming eggs are disinfected in a 1:150 solution of Wescodyne for 10 minutes. No live fish are transferred into the station.

Hatchery vats are cleaned daily and all nets, brushes and hands are disinfected before and after each use. The hatchery, A, B and C ponds are all set up with a disinfecting barrel with 600 ppm Benzalkonium Chloride for disinfecting all equipment before and after use. All mortality is collected, recorded daily, and put in mortality cans with lids that are emptied weekly, or more often if needed by Idaho Animal Products.

Disease

The only major disease encountered during the year (furunculosis) was confirmed by our disease lab, but we did not treat with medicated feed until mortality reached about one-tenth of 11 per day. Total mortality amounted to 8,490 fish. Total numbers in these 4 lots were 203,738 fish. Mortality was picked twice daily and treated once a week with 2 ppm KMnO_4 if mortality went over 20 fish per day.

The only other disease problem was bacterial gill disease, which was not confirmed by our disease lab. Fish were treated three consecutive days on KMnO_4 : first day-1 ppm, second day-1.5 ppm and the third day-2 ppm. The mortality was stopped each time after the first treatment and the fish were back actively feeding again.

FISH FEED UTILIZED

Fish feed used by Nampa Hatchery came from two contract sources: Rangen's and Clear Springs, both located in Buhl, Idaho. Table 3 lists sizes, pounds and cost of feed used.

Table 3. Fish feed utilized during October 1, 1984-September 30, 1985.

Size	Pounds fed	Cost
Rangen's starter	350	101.75
No. 1	2,250	635.10
No. 2	2,700	756.00
No. 3	7,500	2,150.00
No. 4	25,700	4,936.76
Coarse crumble	82,220	8,458.46
1/8 pellet	184,461	30,679.24
No. 1 TM	150	62.48
No. 4 TM	900	286.65
3/32 TM	1,400	416.50
Coarse crumble TMS	3,000	1,375.50
Total Rangen's	310,631	49,858.44
Clear Springs		
No. 2	500	116.90
No. 3	6,000	1,402.80
No. 4	9,000	1,602.00
Crumbles	7,000	8,246.00
3/32	6,340	982.07
1/8 pellet	42,100	6,521.29
Total Clear Springs	381,571	68,729.50

MISCELLANEOUS ACTIVITIES

Visitors at the hatchery have increased this year, although numbers are still quite low for our location close to a population center. We had 259 visitors sign the register. Scheduled tours included cub scout packs, two scout troops, one explorer post, five school classes and two senior citizen groups.

We have three sportsmen groups now using the conference room for three evenings each month for their monthly business meeting. They are the Nampa Rod and Gun Club, Gem State Fly Tiers and Nampa Bow Chiefs.

New equipment purchased for the hatchery included a new fish tank for our 2-ton truck. It hauls 2,200 pounds of catchables very well and has 2 tanks. We also received a new push mower and an air compressor.

ACKNOWLEDGEMENTS

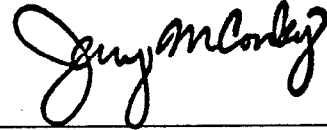
Hatchery staffing during the year included: Walter D. Rast, Fish Hatchery Superintendent II; Gary Ady, Fish Culturist; Arnold Aston, Rick Sanchez, Renardo Reynolds, and Bob Callsen, Biological Aides; Larry Stockton, Todd Hall, David Duncan, Bruce Holubetz, and John Lowry, Laborers; and Kenneth Taylor, Fish Transport Operator.

Submitted by:

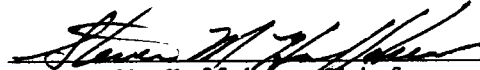
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